

SEPT.  
1991

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## CLUB CALL W9RH

### From the President's Desk

#### *Field Day Report*

Thirteen people signed the log sheet. We operated on 10, 15, 20, 40 and 80 meters with a grand total of 404 contacts. The long contacts were a (J1) Japan and an (NV) Maaratime mobile in the Atlantic. Both were on the Hustler truck antenna. We had three transmitters on the air for quite some time. All were on battery or generator power. One transmitter was on CW most of the time with the other two on SSB. We setup in the rain on Saturday morning. The new beam was put up on a twenty foot ladder tower. It got its front and back mixed up (rain factor). After it was up, they called my attention to it. I didn't have the guts to hand over hand on the boom or to ask the gang to take it down. The SWR was 1.7, so we left it up. Dipoles for 40 and 80 meters with a Hustler triband antenna made up the antenna farm for the outing. All in all the setup wasn't too shabby. What's this QRM all about poor turnout? We all had fun! By the way, don't count the old site out yet. The owner said that he might not build in 1992

pending that green stuff.

I hope he doesn't use Boston Store's bank!

We have a September 26th meeting at

Wauwatosa East High School. Look for signs at the door as to room number (It will be in room #280 as in the past. ed.). We hope to show a video from the ARRL on microprocessors.

In January of 1992 we will be back at Wauwatosa Savings for our meetings - thanks to Fred Krause.

Our old beam has been sold and the cash has been turned over to the treasurer.

Respectfully submitted,  
Edward F. Wille

## MEETING NOTICE

The next meeting of the Milwaukee Radio Amateurs' Club will be held on Thursday, Sept. 26th at 7:30 PM in Room 280 of Wauwatosa East High School. The doors will open around 7:00 PM for ragchewing and the like. The program for this meeting will be a video on microprocessors from the ARRL.

## MRAC-VEC EXAMINATION DATES

On the following Tuesdays, exams will be held from 7:00 to 10:00 PM at 117th and Cleveland in the church hall. Oct. 15th; Nov. 19th, and Dec. 17th. This schedule will continue through 1992.

On the following SATURDAYS, exams will be held from 9:00 AM to 12:00 Noon at Savings and Loan, 7500 W. State St. on the lower level.

Sept. 26th, Oct. 26th, and Nov. 30th. The location and dates for Saturday exams will be announced in a future edition. Please arrive as close to the beginning of the testing session as possible so that

all exams are completed by the end of the session. Bring along your original license and two good quality photocopies, two additional forms of identification (i.e. drivers' license, etc.), a pen and \$5.00 (five dollars) for the exam fee (not required for the Novice exam).

Walk-ins are welcome, but preregistration is requested if possible. To register in advance, send a post card on which you have printed the grade of license for which you are applying, your name, address and telephone number to:

MRAC-VEC  
% Jack Krause, W9JK, 1737 N. 116th St.  
Wauwatosa, WI 53226

or  
% Ed Seruga, KE9JJ, 3840 S. 43rd St.  
Milwaukee, WI 53220

Telephone numbers are: W9JK - (414) 774-6999  
KE9JJ - (414) 545-6299

Amateur Radio has a long and distinguished past. Many devices and technologies have deep roots in Amateur Radio. I'd like to share one aspect of amateur experimentation with you now.

Here is an excerpt from the '1938 Model Aeronautics Yearbook' by Frank Zaic. It deals with the subject of radio controlled models.

### RADIO CONTROL

The thought of Radio Control is old; the actual development work is in its second year. Fair results have been produced by those who know

something about remote control by radio. It was done by sweat of the brow since the requirements are mighty tough, and most of the work is of experimental nature. It is a specialized field into which very few radio technicians stray, so that even radio engineers are in a quandary about exact specifications. So, until the radio end is perfected for commercial distribution the average model builder can only dream of the possibilities. But if you want to be one of the early birds in this field get into the amateur radio game. It is a mighty fine hobby. Our only fear is that you

will desert the model field. But we will take our chances since you will undoubtedly combine the two and give us the perfect radio control.

Mr. Ross A. Hull, associate editor of QST, is undoubtedly one of the most systematic experimenter in this field. He has been successful in controlling a large model sailplane, not once but time after time. Quoting from his article in Oct. 1937 issue of QST:

"Casual glance at the problem would lead anyone to imagine that it is all a perfectly simple business. All one

needs is some sort of receiver that produces enough change in plate current of an output tube to operate a relay of some kind, the relay then being connected to a control device which produces the necessary effect. Closer examination, however reveals a host of problems which are juicy morsels for any inclined man.... Our only hope is to open the subject wide in knowledge that a few hundred of us hammering at the same objective will have the problem really licked in short time."

The receiver and rudder control which did the trick on the sailplane are

shown. We strongly recommend that you obtain this issue of the QST. If you have the slightest thought of working on the radio control, or if you wish to know just (what) makes a radio tick, government regulations on transmitting and licensing, and construction of receivers and transmitters, obtain a copy of RADIO AMATEUR's HANDBOOK from American Radio Relay League, West Hartford, Conn. Price \$1.00 P.

Submitted by Paul Boese,  
KB9FBM

## EDITORIAL

Welcome back to the regular meeting season. I hope that everyone had a pleasant summer. All too soon the trees will be losing their leaves and before we know it the Holiday season will be upon us. Then it will be time to get away from the inclement weather and turn on those radios that have been sitting idle during the summer.

My special thanks to Ed Wille and Paul Boese for submitting the preceding articles. These are good example of the types of things that I would like to have the members submit for inclusion. Share your experiences with the rest of the group. From chatting with many of you at the meetings and elsewhere, I know that there is a wide variety of interests and knowledge

available for the tapping. Let this issue be the start of something new, not merely a one shot deal.

At the suggestion of KB9FBM, there is going to be a small contest. Look at the schematic of the receiver associated with Paul's article and determine what meter band this radio operates on. Names and callsigns of those correctly identifying the band will be published in the December edition of Hamateur Chatter. (I know that's not much of a prize, but this operation is real low budget. Last month they doubled my salary, and I'm still making the same amount!.)

That's all for now. Hope to see you at the meeting. Until next month, good hamming to all. 73.

Joe, KE9LL, editor.

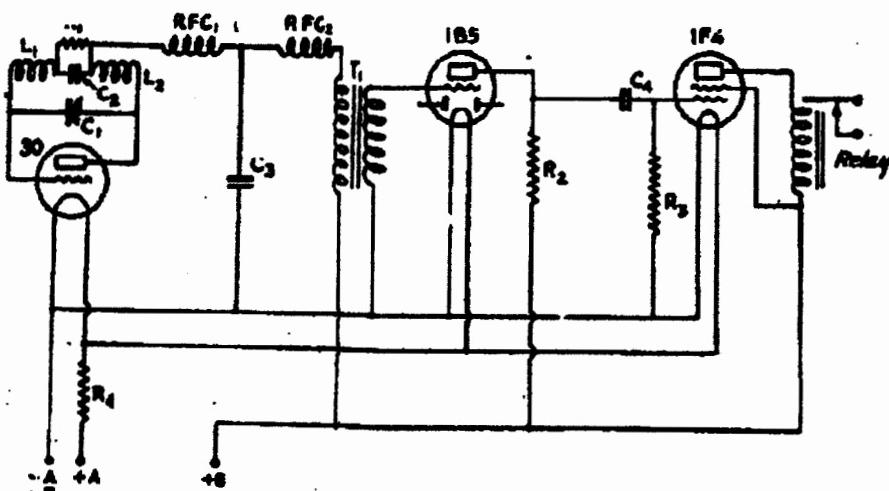


FIG. 3—THE CIRCUIT OF THE PREFERRED RECEIVER

C<sub>1</sub>—17.5-mfd. midget variable (Hammarlund HP-15).

C<sub>2</sub>—100-mfd. fixed condenser.

C<sub>3</sub>—0.01-mfd. fixed mica.

C<sub>4</sub>—0.01-mfd. fixed paper.

C<sub>5</sub>—M-30 National mica padding condenser, with the upper plate bent at right angle to the lower.

R<sub>1</sub>—1 or 2-megohm grid leak.

R<sub>2</sub>—150,000-ohm,  $\frac{1}{2}$ -watt fixed resistor.

R<sub>3</sub>—2-megohm,  $\frac{1}{2}$ -watt fixed resistor.

R<sub>4</sub>—5-ohm fixed resistor.

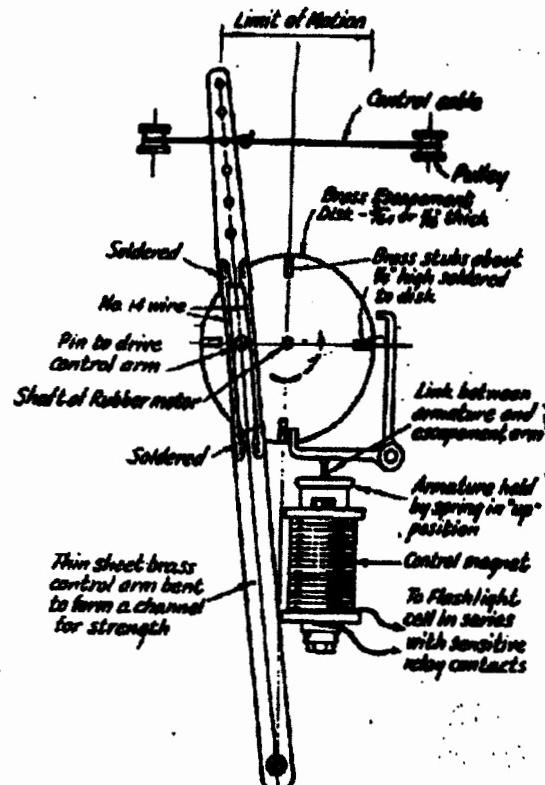
RFC<sub>1</sub>—Ohmite i.h.f. choke.

RFC<sub>2</sub>—End 125 millihenry choke.

L<sub>1</sub>, L<sub>2</sub>—Each 4 turns No. 14 wire,  $\frac{1}{4}$ -inch diameter.

T<sub>1</sub>—Any very small audio transformer. The one originally used is a push-pull affair with the whole second ary used.

The relay is an Eby Type ER12 with a 5000-ohm winding.



THE EXPERIMENTAL ESCAPEMENT USED TO CONVERT THE RUBBER-BAND MOTOR TORQUE INTO RUDDER MOTIONS